

WHAT IS CLAIMED IS:

1. A method of processing a thin, flat substrate, comprising:
supporting the substrate in a generally horizontal orientation; and
transmitting sonic energy to the substrate while flowing liquid onto both
5 sides of the substrate to loosen particles on both sides of the substrate while
maintaining said orientation.
2. The method of Claim 1, including positioning a transmitter adjacent to
one side of the substrate to transmit said energy through the liquid to the substrate.
3. The method of Claim 2 wherein said one side is the upper side of the
10 substrate.
4. The method of Claim 1, wherein said energy is megasonic energy.
5. A method of cleaning thin articles having two generally planar opposite
sides, said method comprising:
applying cleaning fluid to one of said sides while supporting said article
15 in a generally horizontal orientation; and
applying energy to the other one of said sides with sufficient power to
produce vibration on said one side in the area of said cleaning fluid to loosen
particles on said one side, while maintaining said orientation.
6. The method of Claim 5, wherein said energy is applied by applying
20 cleaning fluid to said other side of the article to couple said vibration to the article so as
to loosen particles on both sides of the article at the same time.
7. The method of Claim 6, wherein said energy is applied by an energy
transmitter closely spaced from said other side.
8. The method of Claim 7 wherein said other side is the upper side of the
25 article.
9. The method of Claim 5, wherein said vibration is at one or more
megasonic frequencies.
10. The method of Claim 5 wherein said energy is applied by an energy
transmitter closely spaced from said other side.
- 30 11. The method of Claim 10 wherein said other side is the upper side of the
article.